Perils of Mandatory Disclosure of Interconnection Agreements

Regulating the Evolving Broadband Ecosystem

Professor Daniel Lyons, Boston College Law School AEI/UNL/FCC Workshop, September 2014

Interconnection Markets are Complex

Transit: provides access to all Internet destinations

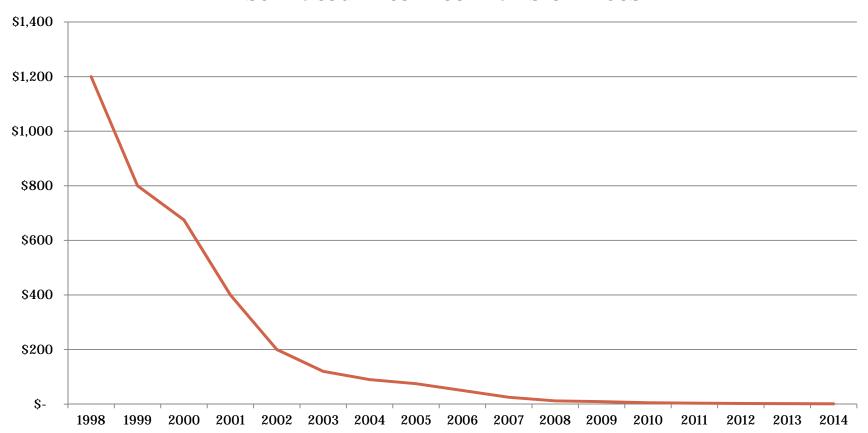
Peering: provides access only to network's customers

Alternative Delivery Models

- Content Delivery Networks (CDNs)
- > Server Farms

Interconnection Markets are Competitive

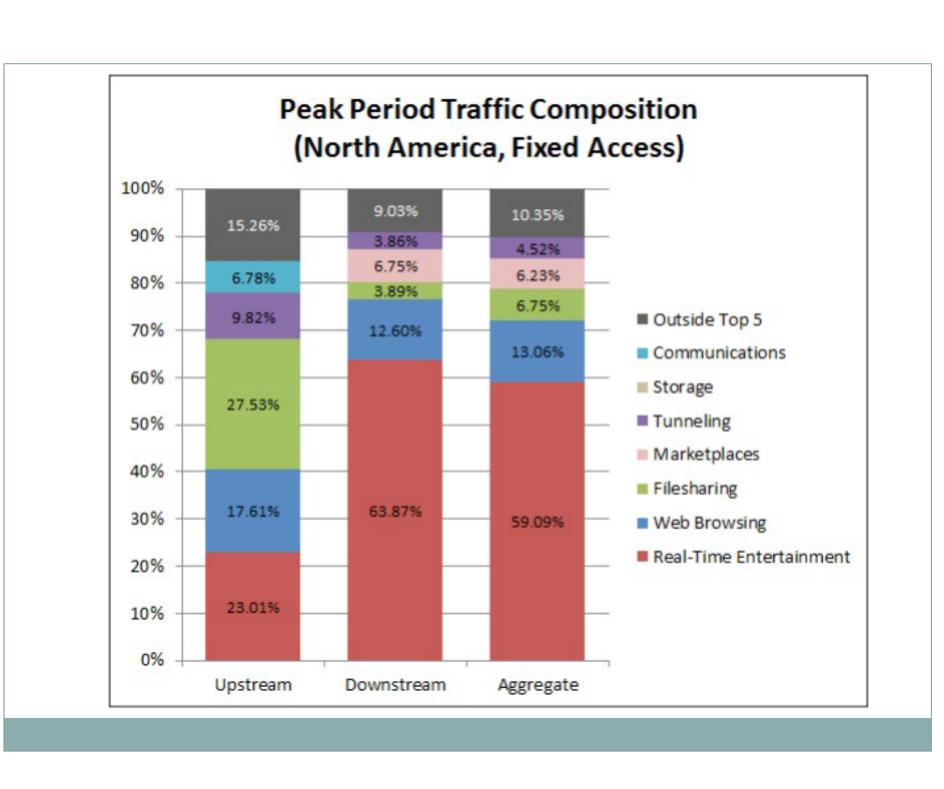
Estimated Internet Transit Prices



Source: William B. Norton, Internet Peering Playbook 2013

Netflix: Cutting Out the Middleman

- Netflix shifts from CDN to transit, via Level 3
 - Increased volume prompts interconnection dispute with Comcast
- Netflix shifts some volume to Cogent
 - Increased volume prompts interconnection dispute with Verizon
- Netflix also builds private CDN
 - Broadband providers refuse to interconnect at zero cost
- Netflix signs direct interconnection agreements



Netflix: ~ 1/3 of Peak-Time Traffic

Rank	Upstream		Downstream		Aggregate	
	Application	Share	Application	Share	Application	Share
1	BitTorrent	24.53%	Netflix	34.21%	Netflix	31.09%
2	HTTP	14.27%	YouTube	13.19%	YouTube	12.28%
3	SSL	6.54%	HTTP	11.65%	HTTP	11.84%
4	Netflix	6.44%	iTunes	3.64%	BitTorrent	5.96%
5	YouTube	5.52%	SSL	3.42%	SSL	3.80%
6	Skype	2.23%	BitTorrent	3.40%	iTunes	3.33%
7	Facebook	2.17%	MPEG	2.85%	MPEG	2.62%
8	FaceTime	1.50%	Facebook	1.99%	Facebook	1.83%
9	Dropbox	1.20%	Amazon Video	1.90%	Amazon Video	1.82%
10	iTunes	1.15%	Hulu	1.74%	Hulu	1.58%
		64.40%		76.24%		74.58%



Antitrust Law Recognizes Risks of Transparency

"[T]he exchange of price information among competitors carries with it the added potential for the development of concerted price-fixing arrangements that lie at the core of the Sherman Act's prohibitions."

United States v. United States Gypsum Co., 438 U.S. 422, 457 (1978)

"A market typically is more vulnerable to coordinated conduct if each competitively important firm's significant competitive initiatives can be promptly and confidently observed by...rivals. This is more likely...if the terms offered to customers are relatively transparent."

FTC Horizontal Merger Guidelines Sec. 7.2 (2010)

Antitrust Offers Three Red Flags

FTC/DOJ Antitrust Guidelines for Collaborations Among Competitors: When Disclosure May Facilitate Collusion

- Information about price
- Current Information
- Individual Company Data



All three implicated by Interconnection Disclosure

Mechanics of Tacit Collusion

- Reduces uncertainty of negotiating supracompetitive price
 - Signals target toward which rivals can move
- Helps enforce collusive agreement
 - Allows easy identification of cheaters
 - Demonstrates punishment

Factors Suggesting Risk of Broadband Collusion

- Concentration of Competitively Important Players
- Significant Barriers to Entry
- Regular/Frequent Interconnection Agreements
- Players are Customers as well as Competitors

Potential Harm Absent Collusion

- Unilateral Movement Toward Supracompetitive Prices
 - Firms may unilaterally set prices based on strategic considerations about competitor behavior
 - Little antitrust liability absent agreement
- Reduced Likelihood of Discounting
 - Discounting unlikely to gain share from rivals
- Less Incentive to Price Aggressively
 - No need to bid against the "unknown deal"

Case Studies



O Disclosure obligation led to 10-13% increase in shipping rates

Ready-Mixed Concrete

Publication of transaction prices drove 15-20% price increase

Telecommunications

FCC concerned that tariffing was potential vehicle for collusion

Other Potential Costs of Disclosure

- Compliance Costs
- Reduced Negotiation Flexibility
- Exposure to Antitrust Scrutiny and Defense
- Risk of Unwittingly Incurring Liability